

Global Steel Trade Monitor

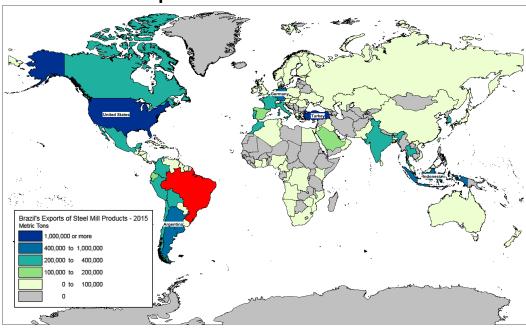
Steel Exports Report: Brazil

Background

Brazil was the world's eleventh-largest steel exporter in 2015. In year to date 2016 (through September), Brazil exported 10 million metric tons of steel, a 0.1 percent increase from YTD 2015. Brazil's exports represented about 3 percent of all steel exported globally in 2015. The volume of Brazil's 2015 steel exports was less than 200 thousand metric tons smaller than that of the tenth-largest exporter, France, and just under 1/8th the volume of the world's largest exporter, China. In value terms, steel represented just 3.4 percent of the total goods Brazil exported in 2015.

Brazil exports steel to more than 150 countries and territories. The five countries labeled in the map below represent the top markets for Brazil's exports of steel, receiving more than 400 thousand metric tons each and accounting for 62 percent of Brazil's steel exports in 2015.

Brazil's Exports of Steel Mill Products - 2015



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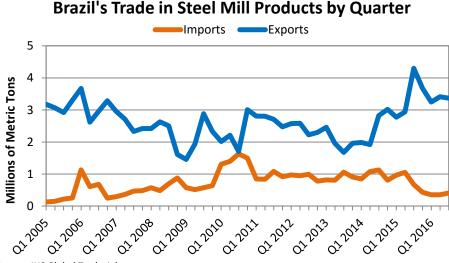
Quick Facts:

- World's eleventh-largest steel exporter: 10 million metric tons (YTD 2016)
- 98% growth in steel exports since Q3 2010
- YTD export volume up 0.1% while export value down 20.2%
- Top three markets:
 United States, Turkey,
 Germany
- Exports as a share of production up from 39.6% in YTD 2015 to 43.8% in YTD 2016
- Largest producers:
 Gerdau, ArcelorMittal,
 USIMINAS, CSN
- 6 trade remedies in effect in 2 countries involving steel mill imports from Brazil

Steel Trade Balance

Brazil has maintained a consistent trade surplus in steel products. Decreasing exports and increasing imports caused the trade surplus to narrow to just 73 thousand metric tons in Q3 2010. Since then, exports have grown 98 percent by Q3 2016, while imports declined 75 percent over the same period.

In YTD 2016, Brazil's trade surplus stood at 8.9 million metric tons — an increase of 22



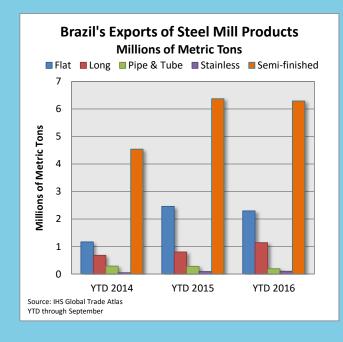
Source: IHS Global Trade Atlas

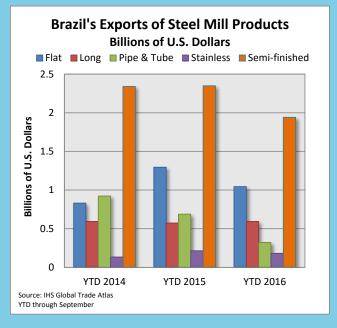
percent from 7.3 million metric tons in YTD 2015.

Export Volume, Value, and Product

In 2015, the volume of Brazil's steel exports increased by 40.4 percent to 13.7 million metric tons from 2014 — an increase of nearly 4 million metric tons. Exports in YTD 2016 were nearly on par with levels in YTD 2015 at 10 million metric tons, an increase of just 0.1 percent. By contrast, the value of Brazil's steel exports declined by 3.2 percent between 2014 and 2015, from \$6.7 to \$6.5 billion. In YTD 2016, export value has declined even further, down 20.2 percent to \$4.1 billion from \$5.1 billion YTD 2015.

Semi-finished steel accounted for 63 percent of Brazil's steel exports by volume in YTD 2016 at 6.3 million metric tons. Flat products represented the second-largest category at 23 percent (2.3 million metric tons), followed by long products (11% or 1.1 million metric tons), pipe and tube (2% or 198 thousand metric tons), and stainless steel (1% or 105 thousand metric tons).



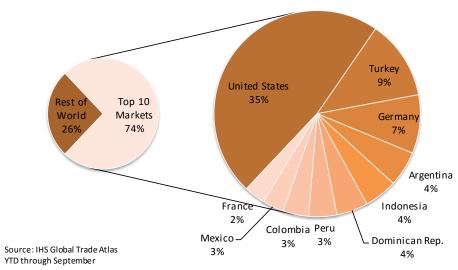


Exports by Top Market

Exports to Brazil's top 10 steel markets represented 74 percent of Brazil's steel export volume in YTD 2016 at 7.4 million metric tons (mmt). The United States received the largest share of Brazil's exports with 35 percent (3.5 mmt), followed by Turkey at 9 percent (0.9 mmt), Germany at 7 percent (0.7 mmt), and Argentina at 4 percent (0.4 mmt).

While the United States has ranked first as a destination for Brazil's steel exports for most of the last decade, Turkey overtook

Brazil's Steel Exports - Top 10 Markets YTD 2016 - Millions of Metric Tons



Germany and Argentina to be the 2nd-ranked destination in 2015.

Trends in Exports to Top Markets

Between YTD 2015 and YTD 2016, the volume of Brazil's steel exports increased to eight of the country's top 10 steel export markets. Exports increased the most to the Dominican Republic (up 432.5% by volume from YTD 2015), Peru (up 68.6%), Colombia (up 27.6%), and Germany (up 27%). Only exports to Argentina and the United States decreased in volume in YTD 2016, down 21.6 percent and 14.9 percent, respectively.

Despite volume increases, the value of steel exports to seven of Brazil's top 10 markets declined in YTD 2016. The United States saw the largest decline in value at 32 percent, followed by Argentina (down 29.4%) and France (down 18.4%). The Dominican Republic, Peru, and Germany were the only destinations with increases in value (up 256.4%, 23.4%, and 9.8%, respectively).

Outside the top 10 markets, notable changes in Brazil's volume of exports in YTD 2016

Percent Change in Exports to Top 10 Markets (YTD 2015 to YTD 2016) Volume Vo

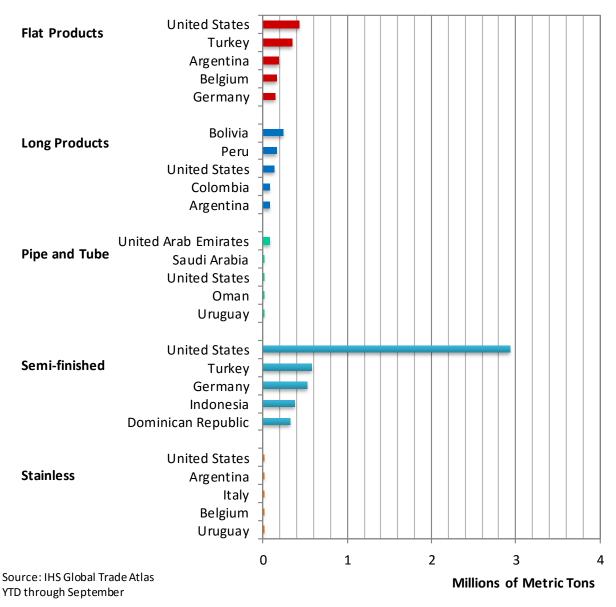
included exports to Bolivia (up 46.8%), Italy (up 53.1%), and Belgium (down 40.3%).

Top Markets by Steel Product Category

Brazil's top export markets by volume vary across types of steel products, though the United States held the top spot in the majority of product categories. In YTD 2016, the United States received the largest share of Brazil's exports of flat products at 18 percent (425 thousand metric tons), semi-finished steel at 47 percent (2.9 million metric tons), and stainless steel at 20 percent (21 thousand metric tons). The U.S. also ranked third as a destination for Brazil's long product exports (12% or 136 thousand metric tons) and third for pipe and tube exports (11% or 21 thousand metric tons).

Bolivia received the largest share of Brazil's long product exports in YTD 2016 at 21 percent (239 thousand metric tons), while the United Arab Emirates received the largest share of pipe and tube exports at 43 percent (85 thousand metric tons).

Brazil's Top 5 Export Markets by Product - YTD 2016



Brazil's Import Market Share in Top Destinations

In 2015, the import market share for Brazil's steel products increased in eight of Brazil's top 10 export destinations. Countries with notable increases in their share of steel imports from Brazil included Belgium (up 3.5 percentage points from 2014), Indonesia (up 3.4 percentage points), and

the United States (up 2.5 percentage points). Argentina Turkey and were the only top 10 destinations to show decreases in their share of imports from Brazil, down 1.7 and 0.3 percentage points, respectively.

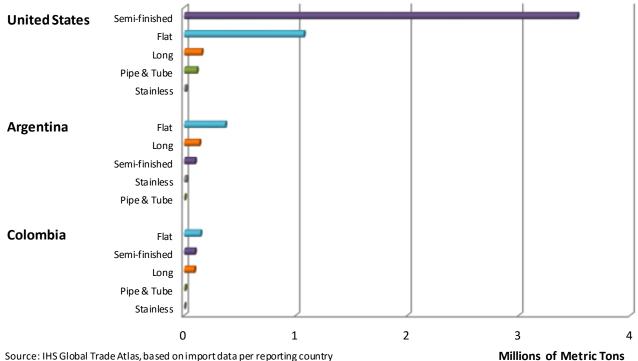
Among Brazil's top export markets, the United States, Argentina, and Colombia received the highest shares of their total steel imports

Brazil's Steel Import Market Share						
Top 10 Export	Share of	Brazil's Rank in	Share of	Brazil's Rank		
Destinations (2015)	Imports from	2014	Imports from	in 2015		
	Brazil - 2014		Brazil - 2015			
United States	11.3%	3	13.8%	2		
Turkey	2.1%	12	1.9%	12		
Germany	0.2%	28	0.7%	18		
Argentina	55.2%	1	53.5%	1		
Indonesia	1.7%	11	5.1%	5		
Belgium	0.4%	19	4.0%	7		
Mexico	0.8%	15	2.0%	9		
Colombia	11.3%	4	11.9%	4		
Mexico	1.2%	12	1.9%	7		
France	0.0%	35	1.3%	10		

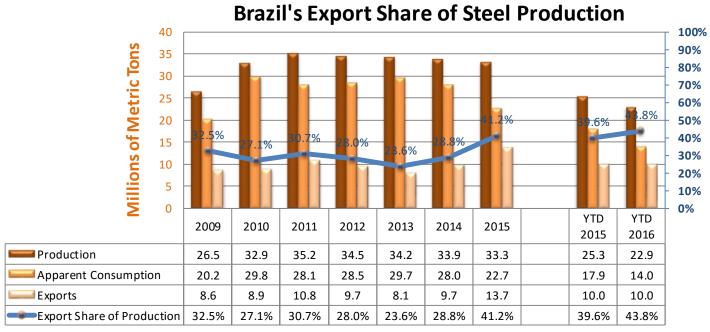
from Brazil at 13.8 percent, Source: IHS Global Trade Atlas, based on import data per reporting country

53.5 percent, and 11.9 percent, respectively. In 2015, flat products accounted for the largest share of steel imports from Brazil in Argentina at 60 percent (367 thousand metric tons) and Colombia at 42 percent (144 thousand metric tons), while semi-finished steel account for 72 percent (3.5 million metric tons) of U.S. imports from Brazil.

Steel Import Composition of Top Market-Share Countries - 2015



Overall Production and Export Share of Production



Source: World Steel Association; IHS Global Trade Atlas YTD through September

Brazil's crude steel production increased by 33 percent between 2009 and 2011 before gradually declining by 6 percent between 2011 and 2015. Production in YTD 2016 has decreased by 9 percent compared to YTD 2015. Apparent consumption (a measure of steel demand) trailed production by an average of 5.5 million metric tons between 2009 and 2014. A jump in exports in 2015 caused the gap between production and demand to grow to 10.6 million metric tons. In YTD 2016, demand has outpaced production by 8.9 million metric tons. Brazil's steel exports as a share of production grew by over 17 percentage points between 2013 and 2015 as exports increased. In YTD 2016, exports as a share of production has grown just over 4 percentage points to 43.8 percent, the highest share since 2009.

Top Producers

Steel production in Brazil is concentrated among four large companies — the majority of which are domestically-owned. Despite large reserves of iron ore in the country, Brazilian steel production uses a mix of iron ore-based blast furnaces and scrap metal-based electric arc furnaces.

Brazil's Top Steel Producers				
Rank	Company	Capacity (mmt)	Main Products	
1	Gerdau SA	25 (worldwide)	Long products, semi-finished	
2	ArcelorMittal Brasil	11	Long products, flat products	
3	Usinas Siderurgicas de Minas Gerais SA (USIMINAS)	9.5	Cold-rolled, strip, heavy plates, galvanized	
4	Companhia Siderurgica Nacional (CSN)	5.8	Hot-rolled, cold-rolled, galva- nized, coated sheets	
Sources: Brazil Steel Institute; Company websites				

Trade Remedies in the Steel Sector

Antidumping duties (AD), countervailing duties (CVD), associated suspension agreements, and safeguards are often referred to collectively as trade remedies. These are internationally agreed upon mechanisms to address the market-distorting effects of unfair trade, or serious injury or threat of serious injury caused by a surge in imports. Unlike anti-dumping and countervailing measures, safeguards do not require a finding of an "unfair" practice. Before applying these duties or measures, countries investigate allegations and can remedy or provide relief for the injury caused to a domestic industry. The tables below provide statistics on the current number of trade remedies various countries have against steel mill products from Brazil.

Steel Mill Trade Remedies in Effect Against Brazil				
	Suspension Agreements			
Country	AD	CVD	and Undertakings	Total
Canada	2			2
United States	3	1		4
TOTAL	5	1	0	6
Source: World Trade Organization, through June 30, 2016				

Global Steel Mill Safeguards in Effect		
Country	Product(s)	
Chile	Steel wire rod	
	1) Seamless pipes, tubes and hollow profiles of iron or non-alloy steel (other than cast iron and	
India	stainless steel); 2) Hot-rolled steel in coils	
	1) Articles of finished casing and tubing; 2) Articles of iron or steel wire; 3) Flat-rolled products	
Indonesia	of iron or non-alloy steel; 4) I and H sections of other alloy steel	
Malaysia	Hot-rolled steel plate	
Morocco	1) Cold-rolled sheets and plated or coated sheets; 2) Reinforcing bars and wire rods	
Philippines	Steel angle bars	
	1) Hot-rolled steel flat products with certain amounts of alloying elements; 2) Unalloyed hot-	
Thailand	rolled steel flat products in coils and not in coils	
Ukraine	Casing and pump compressor seamless steel pipes	
Vietnam	Semi-finished and certain finished products of alloy and non-alloy steel	
Source: World Trade Organization, through August 22, 2016		

Steel Exports Report: Glossary

Apparent Consumption: Domestic crude steel production plus steel imports minus steel exports. Shipment data are not available for all countries, therefore crude steel production is used as a proxy.

Export Market: Destination of a country's exports.

Flat Products: Produced by rolling semi-finished steel through varying sets of rolls. Includes sheets, strips, and plates. Used most often in the automotive, tubing, appliance, and machinery manufacturing sectors.

Import Penetration: Ratio of imports to apparent consumption.

Import Source: Source of a country's imports.

Long Products: Steel products that fall outside the flat products category. Includes bars, rails, rods, and beams. Used in many sectors but most commonly in construction.

Pipe and Tube Products: Either seamless or welded pipe and tube products. Used in many sectors but most commonly in construction and energy sectors.

Semi-finished Products: The initial, intermediate solid forms of molten steel, to be re-heated and further forged, rolled, shaped, or otherwise worked into finished steel products. Includes blooms, billets, slabs, ingots, and steel for castings.

Stainless Products: Steel products containing at minimum 10.5% chromium (Cr) offering better corrosion resistance than regular steel.

Steel Mill Products: Carbon, alloy, or stainless steel produced by either a basic oxygen furnace or an electric arc furnace. Includes semi-finished steel products and finished steel products. For trade data purposes, steel mill products are defined at the Harmonized System (HS) 6-digit level as: 720610 through 721650, 721699 through 730110, 730210, 730240 through 730290, and 730410 through 730690. The following discontinued HS codes have been included for purposes of reporting historical data (prior to 2007): 722520, 722693, 722694, 722910, 730410, 730421, 730610, 730620, and 730660.

Global Steel Trade Monitor: The monitor provides global import and export trends for the top countries trading in steel products. The current reports expand upon the early release information already provided by the Steel Import Monitoring and Analysis (SIMA) system that collects and publishes data on U.S. imports of steel mill products. Complementing the SIMA data, these reports provide objective and current global steel industry information about the top countries that play an essential role in the global steel trade. Information in these reports includes global exports and import trends, production and consumption data and, where available, information regarding trade remedy actions taken on steel products. The reports will be updated quarterly.

Steel Import Monitoring and Analysis (SIMA) System: The Department of Commerce uses a steel import licensing program to collect and publish aggregate data on near real-time steel mill imports into the United States. SIMA incorporates information collected from steel license applications with publicly released data from the U.S. Census Bureau. By design, this information provides stakeholders with valuable information on the steel trade with the United States. For more information about SIMA, please go to http://enforcement.trade.gov/steel/license/.



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